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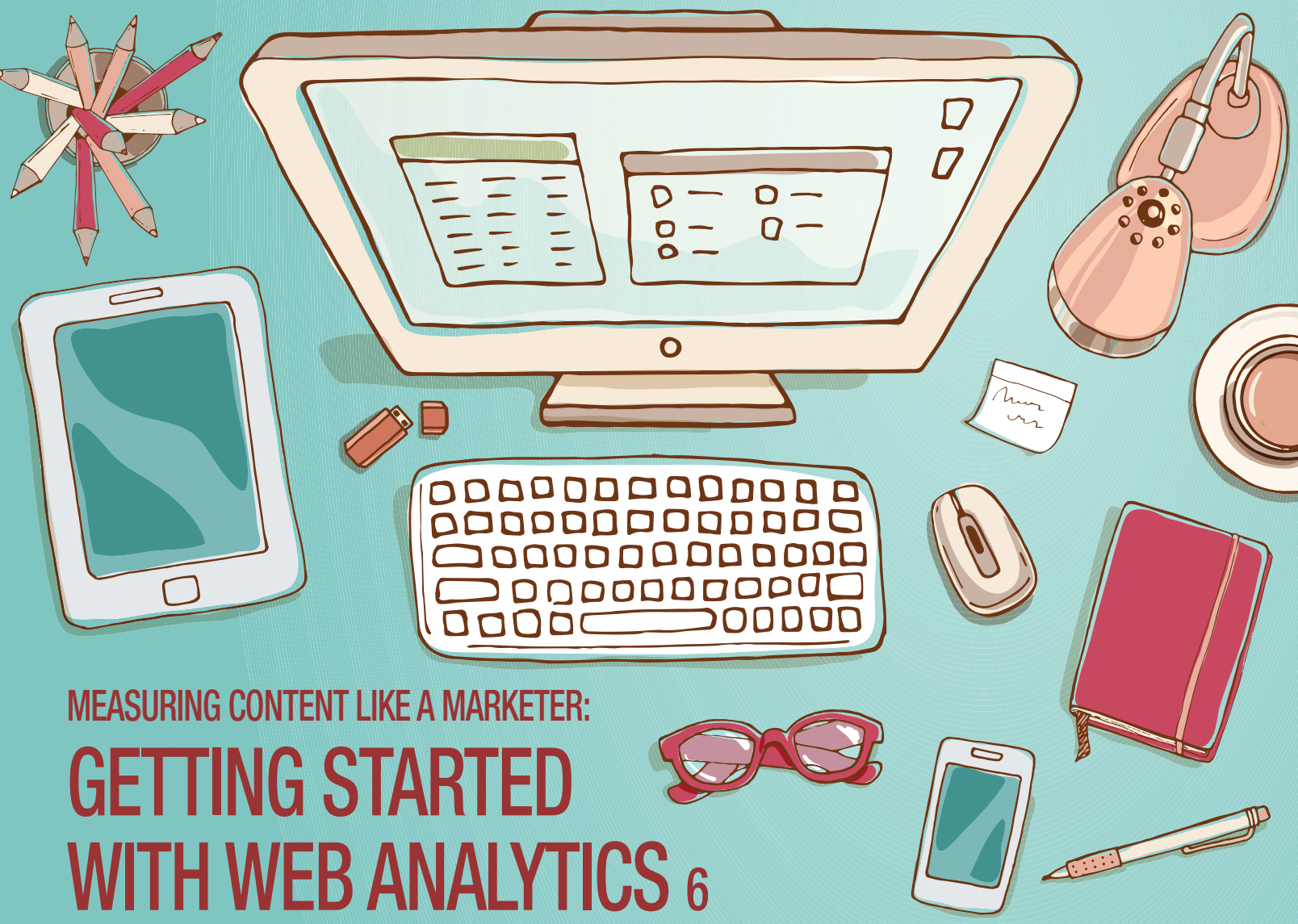

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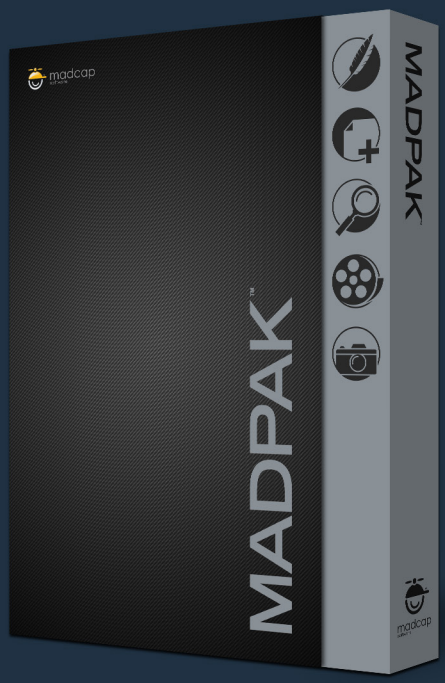

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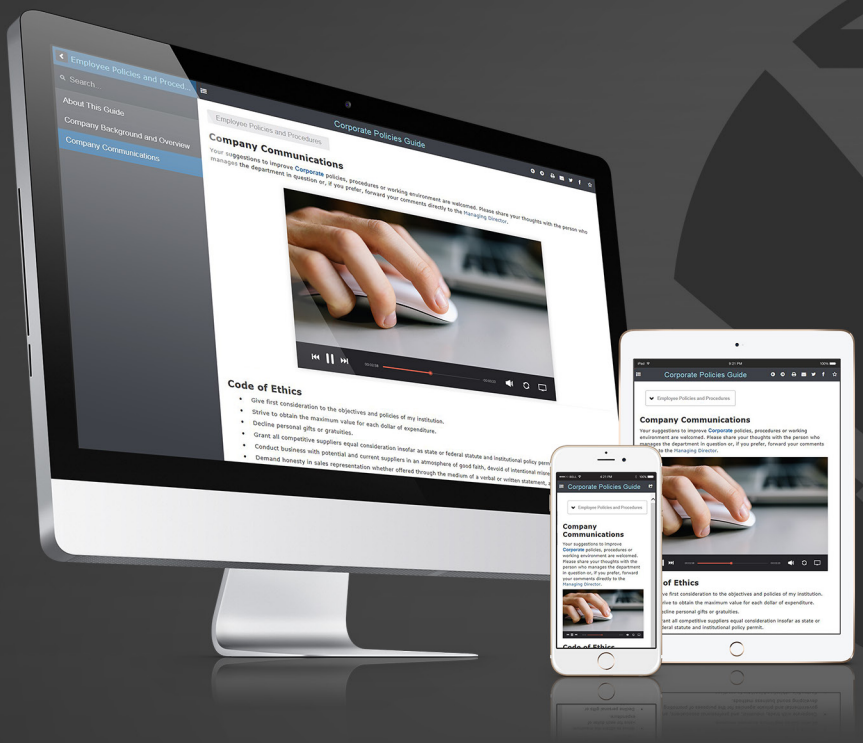

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STC Online Courses	6
STC Summit Pre-Conference Courses (full day)	6
STC Summit Pre-Conference Courses (half day)	3
STC Virtual Summit	4
STC Annual Summit	8
Begin and complete a college-accredited course related to the Technical Communication field	8
Published articles that relate to any aspect of Technical Communication (2/article)	2
Published books publicly available on topics related to Technical Communication (5/book)	5
Presentations at conferences related to aspects of Technical Communication (2/presentation)	2
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A Note from the Editor

MARCH *INTERCOM* FOCUSES on technical writing for the World Wide Web. Two authors in the issue provide Getting Started Guides on small data sets like Web analytics. Jenn Carlos and team contributors Travis Kelly and Vivianne Costa have provided a case study from their work at PROS on using Google Analytics to suppot their documentation and help portal. In "Measuring Content Like a Marketer: Getting Started with Web Analytics," they explain the importance of combining Web metrics (quantitative data) with qualitative data, such as descriptive feedback from surveys.

Chris Whitehead carries this idea forward by showing how to use small data in the tech comm workplace. In "Getting Started with Small Data: How Trends in Analytics Can Add Value to the Role of the Technical Communicator," he explains that small data sets like Web analytics on Web-based documentation can be interpreted and shared with stakeholders to make a case for a better user experience. Both articles provide detailed instructions for collecting analytics and using the interface to spot trends and support a documentation methodology.

In an increasingly plugged-in world, Mindi McDowell has written an article that reminds us how to communicate cybersecurity information with diverse audiences. In "Overcoming Cybersecurity Communication Challenges," she answers several important questions when communicating cybersecurity information: How to communicate with audiences who have a diverse range of technical proficiency? How to maintain consistency and ease of comprehension when the Web-based lexicon changes daily? What balance can be sought between timeliness, completeness, and accuracy?

In "Creating a Successful Information Experience for Users," Sopia Moustakas-Marx explains what information experience is and the challenges information designers face when working on user experience projects. She defines user experience as "writing for interaction," stating that information developers play a crucial role in the collaboration between design and development teams to provide users with an exceptional and intuitive user interface.

In "Globalization Trends Impact Technical Communication Solutions Worldwide," the COO of SmartCAT, Jean-Luc Saillard, explains how globalization and continued development of global communications have caused creative destruction in the translations industry, creating a need for a free and accessible cloud-based translation solution to improve inter-language communications. He explains the past, present, and future of automation translation technologies and gives a step-by-step description to execute a standard translation project.

This issue of *Intercom* also includes three columns on usability, academia, and emerging technologies; a mid-term report from STC's President Bernard Aschwanden; information about earning continuing education units for certification; and an article about the STC Summit closing keynote.

Consider contributing to an upcoming issue of *Intercom* on assorted topics as teaching professional and technical communication, a deep dive into tech comm work tools and work flows, and generational profiles for every career level!

—Liz Pohland
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Intercom, the magazine of the Society for Technical Communication, is published to provide practical examples and applications of technical communication that will promote its readers' professional development.

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Address Changes: membership@stc.org
Intercom Editorial: intercom@stc.org

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Intercom (ISSN 0164-6206) is published 10 times a year (monthly, except for August and December) by the Society for Technical Communication, 9401 Lee Highway, Suite 300, Fairfax, VA 22031-1803, a nonprofit educational organization, as a service to its membership. Membership in STC includes a subscription to **Intercom**. Periodicals postage paid at Fairfax, VA, and additional offices.
Postmaster Send address changes to **Intercom**, Attn: Membership, c/o Society for Technical Communication, 9401 Lee Highway, Suite 300, Fairfax, VA 22031-1803.

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Measuring Content Like a Marketer:

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Getting Started with Web Analytics

By JENN CARLOS | *Member,* TRAVIS KELLY, and VIVIANNE COSTA

MOST MARKETING WRITERS know a lot more about their content's performance than technical writers do. They know how many times an article has been read. They know what type of content is more important to one prospect versus another. Marketing writers know what articles convert and they can quickly gauge the impact of a single edit.

How do they know all of this? Web analytics.

And what do marketing writers do with all this knowledge they've gleaned through analytics? They prioritize their time and content with precision. They don't have to say yes when they are asked to work on a high-effort, low-value piece. They push back with cold hard facts. And they can prove—P-R-O-V-E—that their content is impacting business goals.

You need to be able to do all of this, too. After all, technical content is more important than marketing content; theirs just looks better.

How Our Team Did It

Our team at PROS owns documentation and the help portal it lives in, called Connect. Eight strong, we support the technical content needs of 15 enterprise software products, and we use analytics on a daily basis, just like marketers.

In the beginning, the team published to a cloud-based documentation portal while Google Analytics (GA) ran passively in the background. When we decided to build our own portal on Drupal, we got dead serious about user experience and content optimization.

Before we provide a walkthrough of our subsequent process, we want to emphasize that the optimal mix of insight is one that includes Web metrics *and* qualitative data. We conduct regular user studies and usability testing sessions with our in-house UX researchers. We also have "was this helpful" on every page of content with the option to add comments, and a persistent feedback button on our documentation site. This helps us paint the whole picture and provides much needed context to the raw data.

We started with Google Analytics' default reports and segmented traffic into two groups: customers and employees. It was easy to do this because, like many companies, most of our employees access the portal through the same network. Network domain proved to be a very important dimension for us because we could also see our customer's individual network domains, like *acmeinc .host.com*, and further segment down to their level.

Separating Employee from Customer Traffic

Your IT department can tell you what your company's network domain is called (it'll look something like *companyname.net* or *internetprovider.net*), and there may be a few of them. Your marketing department might already have this on hand as well, as they are likely filtering customer traffic on your public website.

Once we had the network domain, we *Added a Segment*, called Employees. Then we created a *New Segment* and configured the following under *Advanced Conditions*:

Filter Sessions Include
Ad Content: Network Domain
Contains: exactly matches
Field: *companyname.net* (if you have multiple network domains, then add them using the *OR* condition button)

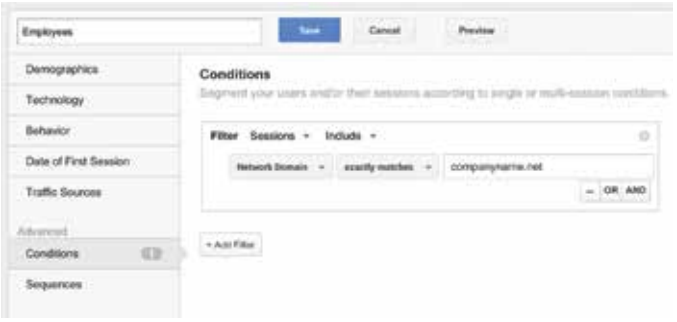

Figure 1. Separating employees from customer traffic in Google Analytics

Customer Segment

We filter for customers by excluding our company's network domains. We followed the same steps above to create a New Segment, called customers. We kept all configurations the same, except the *Contains* condition, which was changed to *does not exactly match.*

Once we knew what customers were doing, we started sending periodic emails to the product leaders and executives in our organization—just the month-over-month basics and a bulleted summary. The summary contained data on unique visitors, total visits, pages per visit, visit duration, most active customers, and most popular content. These emails generated interest in what we were doing and made us look like we were on top of things, but we were reporting vanity metrics because they had no goal, we were just hoping for uptrends.

If you want to know what your most important key performance indicators (KPIs) are, then start with your business goals. We asked ourselves and our stakeholders, "What is the ultimate goal of our content?" Enable self service. Luckily, there's a lot of existing research on measuring self service, and we settled on a simple formula: the number of visits that didn't result in a support ticket. This is our self-service rate and most important metric. After monitoring it for six months, we knew our average was 91%. If this number fluctuates, we drop everything and look into why.

Measuring Self Service

At PROS, Connect is the entry point for submitting support tickets, so it's easy for us to grab this data ourselves. We installed a tracker on the "Submit a Ticket" button. If you don't have access to your support system, then just ask your customer support team to send you a monthly report on how many tickets have been opened. If they can strip bugs and feature requests out of it, even better. Your results may not be as precise, but this is about establishing a baseline and then monitoring wild swings. We use the following formula.

100% Total Sessions - % of Sessions that resulted in tickets = Self-Service Rate

We also identified other important goals for our content and portal, and then started working backward to develop our ideal reporting strategy. What did we want to see for ourselves? What did we want to show others? Once our goals were clear, we could dig into Google Analytics data and define the KPIs for measuring them, which can be tricky for a documentation site.

Goal: More customers using our content and site

KPI: Increase in total sessions
KPI: Increase in new user registrations
KPI: Increase in new visitors
KPI: Increase in returning visitors

Goal: Help users find what they need quickly

This is where things diverge from marketing content-strategy KPIs. From research, we know most of our traffic uses the site to solve a problem. That aligns nicely with our goal of self service. So what we want to see is our users getting information quickly, leaving, and coming back when they need something else.

KPI: Decrease in pages/sessions
KPI: Decrease in average session duration
KPI: Increase in returning users

Goal: Increase participation in our community and forums

One less support ticket, right? We want our customers asking questions in the forum, so we have a searchable record of solutions for other users to reference. We built a custom report in Drupal to help us with two of these KPIs.

KPI: Increase in forum posts + comments (Drupal)
KPI: Decrease in unanswered forum posts (Drupal)
KPI: Increase in visits to community pages (Google Analytics)

We also measure activity at a user level in Drupal to see who posts the most often. We call out the top three employee participants in our monthly stakeholder report and treat them like gods.

Beyond those site-wide metrics, we wanted to see our content's performance at a detailed level so that we could hone in on what was truly useful to our audience and gauge optimization efforts. In order to do that, we dug deep into Google Analytics' Content Drilldown.

Our content URLs are structured by site section, product, type, and topic as follows. This structure makes them very easy to segment and analyze.

portal.com/documentation/microwave/user-guide/button-panel
portal.com/knowledgebase/refrigerator/maintenance/coolant

Most Popular Content

We make the assumption that more page views equals more user value, and we sort the path page levels in Google Analytics by total page views. When tasked with two projects, both of equal size and stakeholder priority, we focus on the one that statistically results in more activity.

- Path Page Level 1 tells us what sections of the site are most frequently visited.
- Path Page Level 2 tells us what products are most frequently visited.
- Path Page Level 3 tells us what content type is the most frequently visited. Our content types include guides, help topics, a knowledge base, forums, and release notes.

We break it down even further at the product level. This is super important data that you'll most definitely want to share with respective product teams. It's post-purchase insight they are otherwise blind to. Remember how we are making the assumption that more activity is a good thing? Your product teams may have another explanation. Sometimes we discover that the frequency means there is a bug in that area of the product, or something that needs UX's attention. Sometimes a customer is struggling to onboard into the new system or multiple customers are searching for a feature that doesn't exist. Your qualitative data will help you tell the full story as well. We have GA dashboards for each product and monthly reports that include:

- # of Customer Sessions
- # of Employee Sessions
- Most Active Customers (network/hostname, sorted by page views)
- Most Popular Content (what specific content pages are getting the most page views)

Search Activity

Search data is fascinating, as it gives us insight into how our users *want* to interact with our content. We look at

the most popular search terms and compare the search results. Are the results accurate? How many search results pages do they have to click through to get what they want? Are the top results well written? Are users searching for content that doesn't exist (and that we need to create)? Search terms also tell us how users search so that we can optimize metadata and titles for maximum findability. We monitor search using GA's preconfigured dashboard widgets and standard report:

- Top Search Terms Widget: For a given segment/date range
- Search Usage Widget: Showing % of search usage and search exit rate
- Search Terms Standard Report: Detailed search activity in a variety of contexts

We also passively monitor (meaning, we do not report on) other types of GA data, such as:

- Browser & OS: What are our users running? This data was used to justify end of IE9 support for our company's products.
- Language & Location: This helps us scale/justify localization and optimal times for system outages.
- Bounce Rate & Exit Pages: This shows us how our users are leaving the site.

Putting It All to Use

The analytics we collect serve two purposes: 1) it informs our content strategy, and 2) it promotes the importance of our work.

Informing the Content Strategy

Monitoring content performance and user behavior as a team makes prioritization and brainstorming so much easier. Rather than relying on intuition or engineering mandates, our data shows us what works and what needs improvement. Our strategies typically revolve around increasing the breadth and findability of high-performing content and optimizing low-performing content until we can prove that it needs to be eliminated.

Analytics also takes a lot of the guesswork out of where to start. We were thinking of removing system interface diagrams from Connect; maintaining changes with every release was tiresome and we never got any feedback on them. Our first step was to refer to GA and, low and behold, we found lots of returning traffic. So we kept the diagrams, and then we made them easier to find for a better user experience.

Conversely, when we're asked to start work on something that doesn't statistically perform well—like news articles—we come to the table with data to prove that this effort isn't worth the time and a few alternative solutions that consistently yield views. Analytics can take you from supporter to knowledgeable collaborator very quickly.

Promoting Our Work

Our Web analytics report is like a monthly newsletter to stakeholders and the people who sign our paychecks, many of whom know very little about metrics (or technical content), so a data dump of activity is wasted effort. We used piktochart to create an infographic for our monthly report and embed it in an email. Making the report attractive is mandatory; sexy it up or it'll go unread. It's critical here to show that you are working to meet business goals, so we took ours—enabling self service—and made the self-service rate our focal point. We also distilled the report down to the most essential metrics to not dilute our message. We included subheadings to explain the data in layman's terms and added a footer noting that the reports are available at a product level. It would be an injustice if I didn't remind you to blind copy (BCC) your recipient group. After the report is sent, a lot of questions may fly around, and some people may get defensive because the data highlights product inefficiencies, plus it's no fun justifying an anomaly on blast to your CTO. Do it *or else.*

We hope this insight into how we're doing it at PROS empowers you to explore your content and fine tune its impact through analytics. Long live the docs, and the writers who create them. We'd love the opportunity to talk more about analytics in documentation and how we are beefing up reporting this year with new data. Reach out at any point during your journey with them.

Here's a list of some resources that helped us along the way:

- Digital Marketing and Measurement Model by Avinash Kaushik, *www.kaushik.net/avinash/digital-marketing-and-measurement-model/*
- Everything a Product Manager Needs to Know About Analytics by Simon Cast, *www.mindtheproduct.com/2013/02/everything-a-product-manager-needs-to-know-about-analytics/*
- The #1 Mistake Everyone Makes when Creating Infographics by Maria Parra, *https://venngage.com/blog/the-1-mistake-everyone-makes-when-creating-infographics/*
- Google Analytics Platform Principles, Google Analytics Academy, *https://analyticsacademy.withgoogle.com/course/2*

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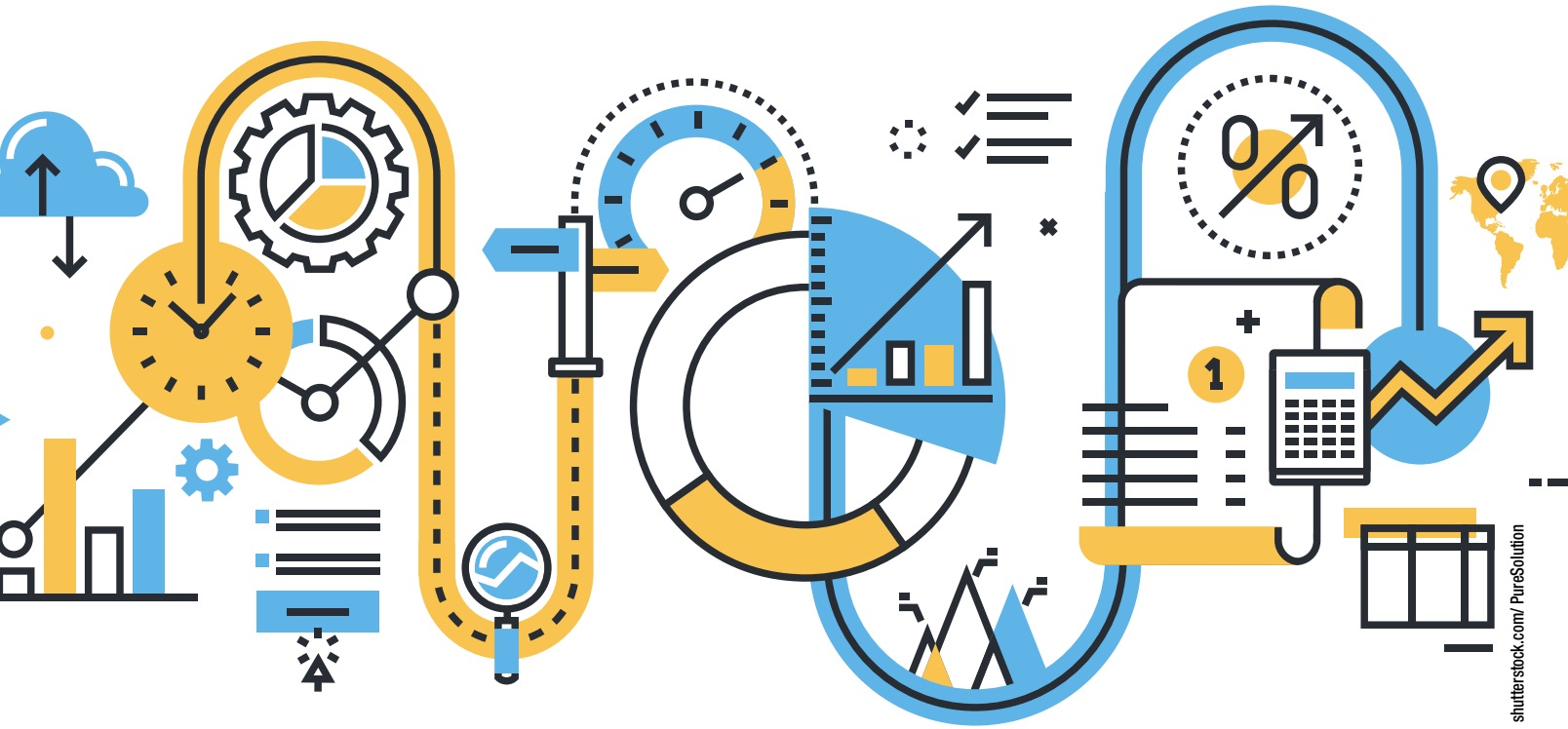

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How Trends in Analytics Can Add Value to the Role of the Technical Communicator

By CHRIS WHITEHEAD

BIG DATA. SMALL DATA. These are powerful buzzwords that can inspire even the most insipid investor to throw wads of cash in all directions. And with good reason. Ralph Finos, an IT industry market research analyst, projects the industry to grow from 27 billion dollars in 2014 to over 60 billion dollars in the next four years. But what do these terms even mean, and why should you, as a technical communicator, care?

What Is Data?

In their book, *Big Data: A Revolution that will transform how we live, work and think*, Viktor Mayer-Schönberger and Kenneth Cukier describe the inception of the term. In the early 2000s, the term *big data* was coined to refer to data that was too large to fit in the memory of the computers used to process data, although now the term is used more generally. These days, big data seems to be used to refer to any project involving data analysis.

Then what is small data? The Small Data Group defines it as data that "connects people with timely, meaningful insights (derived from big data and/or 'local' sources), organized and packaged—often visually—to be accessible, understandable, and actionable for everyday tasks." This means that big data is information beyond the ability of a person to comprehend, so it needs to be broken down in order to be useful (the perfect task for a technical communicator, right?).

In a presentation about deep learning, Ben Taylor, the chief data scientist for HireVue, explained that some types of big data analysis, in this case neural network machine learning, are expensive and sometimes overkill. You can spend time and money collecting and processing enormous amounts of data, then hire people to interpret it and break it down small enough for comprehension, and you'll end up with the same answers you could have gotten from a smaller data set. This makes small data sets like Web analytics, that are easy to interpret and summarize, even more valuable.

Why Is Data Valuable?

Adobe is currently running a television commercial in which a man sits at a bar visibly distressed about a multi-million dollar ad campaign he invested in without looking at the data (*https://adland.tv/commercials/adobe-gambler-super-bowl-gambling-2016-30-usa*). The argument is that if he'd looked at the data, his business decision would have been less of a gamble. While all decisions cost time and money, decisions based on data mitigate risk, increasing the chance of a positive outcome.

Think of data as information. As a technical communicator, you would never undertake a project without first gathering information. You might interview subject matter experts, you might test the product, and in the software industry, you might even dig into the code so that when you start documenting, you have information (data) that allows you to write targeted information for your audience.

New technologies are continually creating new ways to collect information. Using these tools, Web-based help documentation gives technical communicators access to a significant source of information. Are there features that are difficult to use or understand? Are there some features that are more used than others? By leveraging that information, technical communicators can answer questions to improve product design, reduce support workload, and streamline their own knowledge architecture.

Start Collecting

Web analytics are the perfect place to start with small data. A good marketer will run analytics on their websites to collect important, decision-making data. Web-based documentation can be used to collect data the same way. There are a myriad of analytics tools out there ranging from free-to-use Google tools to the Adobe Marketing suite. For those getting started, I would recommend Google Analytics. First it's free, and second it's easy to use. It's also easily customizable so you can get answers to the questions that come up as you dig through your data.

For many of you, the analytics platform will be a new technology. But this won't be a problem. Not only is the documentation straightforward and easy to follow, but Google has created the free Analytics Academy with courses like "Digital Analytics Fundamentals" and "Ecommerce Analytics: From Data to Decisions" to not only help you get started, but to also turn you into an analytics expert in a short amount of time.

Once you've set up your analytics tool, you will have small data, both in the sense that the data set is small and in the sense that it is visually broken down by your tool for human comprehension. Depending on your situation, some of that data will be useful and some won't. For example, our team is currently far more interested in which pages are being viewed than which cities those views are coming from. Every situation is different, but once you have the information, the skills you already use as technical communicator will help you interpret and share.

Start Learning: A Case Study

Sometimes after you start collecting analytics, you don't know what to look for. We started with a common metric: page views. Starting at the top, we looked at the more popular pages. The home page was the most popular, that was no surprise. The next few pages made sense, too. Our writers were very familiar with the software and our audience, and they had done a good job guessing what the user would need help with. On the other hand, our fifth most popular page was a surprise. This was a feature in our software that we assumed was easy to use. After all, we all knew how to use it. This was our first insight. We quickly went in and beefed up our documentation for this topic, instantly improving the value of our helps.

At this point, we wanted to know if our changes were helpful. We worked with our developers to create a feedback script that we could add to the bottom of our topic pages. We simply asked the user, "Was this topic helpful?" and left a space for comments. The feedback code sent us emails with the users answers and the topic the survey came from. Sometimes the feedback was positive, which was nice. But more often than not, the feedback came in that the topic wasn't helpful. In that case, we reviewed the comments and updated our topics accordingly.

At this point, we were noticing significant time-savings and increased positive feedback. Small data was working, and this was the start of our targeted documentation methodology.

We kept looking at the data, and we noticed more trends. There were topics we had written and were maintaining that no one was reading. After some discussion, we decided the topics weren't being read for one of two reasons. Either they weren't needed, or the user couldn't find them. Instead of using our best guess, we wanted to use data to decide what to do with the topics.

Google Analytics has a feature that let's you track site searches, so after some research, we added this to our Web helps. The search data was just what we needed. There were some cases where writers and users were using completely different terms to refer to features. As a result, users weren't finding the topics they needed. In other cases, there were topics with no corresponding searches. We stopped maintaining those pages, resulting in another time saver.

The search data helped us build a better Frequently Asked Questions page and add hot topics to our landing page. We added analytics events to track which links were being clicked, and updated the links as needed. The more we learned about our analytics tool, the more questions we answered and the more targeted our approach. Now when our team makes a decision regarding our documentation, it's data driven.

Not only has this impressed our boss, our team runs more efficiently. Now our team has the time to reach out to other units across the company to document internal processes. We've been able to work with live support to enhance their knowledge base. We've also taken ownership of the documentation for previously undocumented products, significantly increasing the value added by our team in the grand scheme of the organization.

Share Your Data

In the Software as a Service world, we're constantly devising new features to stay ahead of the competition, and Agile development methods allow us to continually improve existing features. Now, as a technical communicator, I have an emotional connection to the value of a robust documentation system, but the truth is, users would prefer to spend more time using the software than reading help files. As we looked at our data, we were seeing searches and page views for certain features. According to our data, users were looking at the helps almost as much as they were using the feature. We deduced that this was because that particular feature was hard to use and understand.

We gathered all the data we had about that particular feature and put together a brief report. We showed that users needed constant help to use the feature. We went through our feedback emails and found that there were a lot of comments, not about our documentation, but about the difficulty of using this feature. We included these in our report.

Prior to this, documentation had been viewed as auxiliary in our organization. But when we submitted our data report to the project managers and product owners, there was a paradigm shift. We showed that we had data about how customers were using our product. This was key information the company was already trying to collect. Marketing had spent significant time and money sending surveys to try and collect this data. The company was spending money to send project managers to do ride-alongs and in-person interviews with customers. While both of these methods did provide information and insight, they were more expensive, more time consuming, and reached fewer customers than our data collection methods. Our product owners were ecstatic and started implementing our suggestions into their upcoming design changes.

Now we send monthly reports from our analytics tools to project managers and lead developers. We share our feedback emails with our user experience engineers. Our documentation team has become a key collaborator across the company. Some project managers have added our team as a permanent part of their planning process, where we sign off on software changes and stories before they even reach the developers.

This is how we've been able to use data in our team, and while we're pretty impressed with our small data expertise, it all stemmed from our core skills as technical communicators. We used our research skills to learn new technologies and ask questions. Our ability to understand an audience helped us identify additional audiences for our findings within our organization. Finally, our communication skills allowed us to interpret the data in a way that managers and developers could understand and appreciate.

What's Next?

Once you're touched by the data bug, there's plenty of room to grow. You may want to upgrade your analytics tools, or add additional tools to answer more specific questions. You may want to conduct a more sophisticated analysis of your data. Luckily, there are plenty of ways to learn more. Informally, there are numerous blogs on small data. *Smalldatagroup.com* is a good place to start. I also like to use sites like MeetUp to find groups that focus on data science or the computer languages used to analyze data, such as R or Python.

For more formal training, the online learning community provides options. several of our writers are currently enrolled in the data science specialization through Johns Hopkins University on Coursera. The cost is minimal, and even after the introductory course, our writers had more and more ideas about what we could do with our data.

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Overcoming Cybersecurity Communication Challenges

By MINDI MCDOWELL

FROM COMMUNICATION to healthcare, and power grids to household appliances, almost every facet of our lives relies on the Internet and networked devices. Although advances in technology and global connectedness create opportunities, they can also cause a surge of new security risks. Mass media outlets regularly report incidents of computer viruses and other malicious software (malware), data breaches, and theft of credit card and medical information.

Communicating information about those issues is important for helping individuals and organizations protect themselves, but being a technical communicator in the field of cybersecurity often comes with interesting challenges. How do you convey cybersecurity information to audiences with a range of technical proficiency? How do you maintain consistency and comprehension when the lexicon associated with Internet threats evolves almost as quickly as the threats themselves? What's the balance between timeliness, completeness, and accuracy?

Relaying Information to Diverse Audiences

Due to the pervasiveness of Internet-connected devices, cybersecurity affects everyone from non-technical users to highly technical security researchers and network administrators. Understanding the needs and priorities of diverse audiences can help you tailor information accordingly. An inexperienced user might need explanations about fundamental concepts coupled with simple, straightforward instructions and guidance. Executives often want easy-to-scan highlights that capture key points. Network administrators may rely on details in a technical analysis to determine risk, potential impact, costs, tradeoffs, and appropriate solutions in their environment. Consider the following aspects when assessing how to adapt information to a specific audience:

- **Message**—What information does the audience need or want to know?
- **Depth**—What level of detail is appropriate?
- **Format**—What is the best way to present the information (language, tone, style conventions, graphics, examples, etc.)?

Often, information about cybersecurity issues is not confined to a single audience. After reviewing key points, an executive may want to forward technical details so a network administrator can assess implementation feasibility. A network administrator may need to provide users with simple guidelines to secure their systems. A reporter may interpret research findings to relay information about a potential threat to the general population. Offering only one representation of the information targeted at a specific audience can force other audiences to interpret or adapt the content themselves. One solution for accommodating reuse is to create multiple versions of the same information, customized for different types of readers. Another solution is to segment the information into different sections or to produce companion pieces. These approaches give you more control over the information and how it is presented, allowing for wider distribution to multiple audiences without misinterpretation, misrepresentation, or degradation.

Maintaining Consistency and Comprehension

As the field of cybersecurity evolves, so does the associated vocabulary. Representations of common terms can vary across sources, with differences in capitalization and spelling (e.g., website, web site, Web site, Website), hyphenation (e.g., antivirus versus anti-virus), acronyms and initialisms (e.g., C2 versus C&C to represent command and control), and even choice of terms to refer to an incident (e.g., attack, intrusion, breach, hack, compromise). Some terms that appear to be interchangeable may actually have distinct interpretations based on context and perspective, and a few seemingly generic terms (e.g., breach, exploit, vulnerability) have specific legal meanings. The terminology tends to shift over time as certain conventions become more widely adopted. This fluidity is challenging for technical communicators, particularly when working with authors and subject matter experts who are used to different conventions.

A bigger challenge for comprehension is the use of multiple names to refer to the same threat. For example, antivirus vendors or security researchers may assign different names to the same malware. Threat groups can also be known by different names, evidenced in late-2015 by media reports describing activities conducted by the Islamic State of Iraq and the Levant (also known as ISIL, IS, ISIS, and Daesh).

In the absence of universal standards, there are simple strategies that technical communicators can use to promote consistency and comprehension:

- **Create a "living" style guide**—Establish a common vocabulary within your organization, and periodically review and update guidance to ensure that it remains in line with current conventions used by other cybersecurity organizations and publications.
- **Acknowledge alternate names**—When appropriate, reference other names for the same threat (e.g., Dyre, also known as Dyreza, Dyzap, and Dyranges, is a banking trojan.).
- **Define potentially unfamiliar terms**—Ensure that the surrounding text includes sufficient context to explain a term, and consider linking to other sources for more detailed explanations of complex concepts.

Balancing Timeliness, Completeness, and Accuracy

Cybersecurity has an inherent sense of urgency. Proactive communications need to reach audiences in enough time to protect their systems against a threat, and reactive communications are important for minimizing impact. However, speed is not the only consideration. Figure 1 shows various factors to consider when determining what to say, and when.

Relevance is an overarching consideration, as the other factors don't matter if the information is irrelevant. But the overlap of timeliness, completeness, and accuracy in Figure 1 is intentionally small. It is rare to strike a perfect balance, but determining which factor to emphasize can be difficult. Favoring completeness and accuracy over timeliness could allow another organization to publish first, but rushing to publish could spread inaccurate information that you later have to retract or correct. The wrong decision could threaten your organization's reputation and relationships with customers and consumers, particularly if they invested resources, time, and money into ineffective solutions.

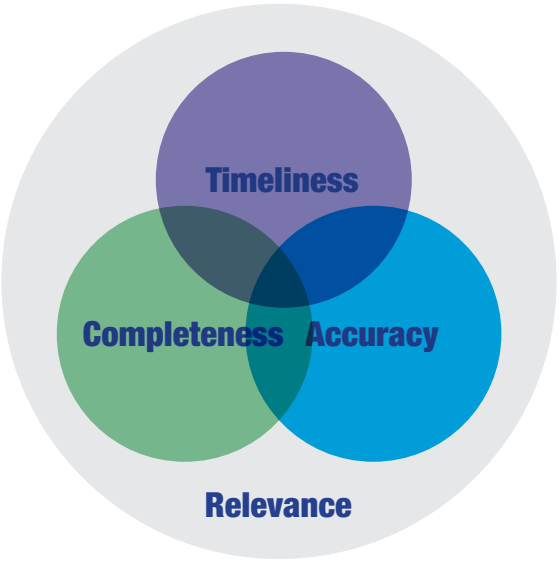

Figure 1. Factors to consider when determining how and when to communicate cybersecurity information.

The type of content may influence which factors are most important:

- Summary of current events—timeliness
- Initial details about an emerging threat—timeliness
- Notification about a serious, active, widespread threat—timeliness, accuracy
- Instructions for mitigating a threat—accuracy, completeness
- Detailed analysis of a threat or threat group—accuracy, completeness

Conclusion

You don't have to be a professional communicator to be aware of the Internet's influence on language. Selfie, googling, tablet, tweet, and cloud are a few examples of new or redefined terms that have become part of mainstream communication, but lack of standardization in the general vocabulary can cause confusion. Awareness of cybersecurity issues has also become mainstream as malware and data breaches become more prevalent. As our reliance on technology grows, communicating cybersecurity information to a range of audiences will become increasingly important for protecting everyone.

MINDI MCDOWELL *has more than 15 years of experience as a writer and editor in the field of Internet and network security. She has edited, authored, and co-authored numerous documents describing Internet security topics for technical and non-technical users. Mindi earned a Bachelor's degree in English, a Master's degree in professional writing, and a certification in instructional technology.*

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Creating a Successful Information Experience for Users

By SOPHIA MOUSTAKAS-MARX

What Is Information Experience?

Imagine you're driving in your brand new Acura TL. It's your first car, and you love how it drives. An icon appears on the dash with a bright orange exclamation point. What does this icon mean?

You're confused, worried, panicked. Is something overheated? Is the engine going to die? Should I pull over? Or should I ignore it and hope for the best?

Maybe if you had a more-detailed icon, like this one, your mind would be more at ease. A minor addition of text stating that the car requires service at 10,000 miles (or is it kilometers?) adds to the message's clarity and ensures that the user knows it is important but not urgent.

Another option is to display a message reminding you to take your car in for service soon (assuming you can understand the language in which the message is written).

All software contains information to enable users to accomplish something. The information can be found in the user interface as tooltips, icons, help, on-screen messages, and other elements. Users rely on this information to accomplish a particular task quickly and easily.

Information developers play a crucial role in the collaboration between design and development teams who strive to provide users with an exceptional and intuitive information experience in the user interface. The goal is to design an intuitive and clear user interface, so that the need for massive amounts of documentation is eliminated (although sometimes additional content is needed). We use our professional experience to apply known principles of how users read and consume information. This helps to simplify user tasks, increase productivity, and reduce frustration among users.

Meet Linda Lior, Information Design Guru

Our Palo Alto team recently had the opportunity to meet with Linda Lior, an information design consultant, UX writer, and information designer. Linda was kind enough to share her experiences as an information designer. She described how we can apply the principles of information design at SAP.

Linda has worked in software development for 20+ years, focusing primarily on information design and usability. She was a user experience researcher and technical writer at Microsoft for 10 years, and currently works as a freelance information design consultant. Linda is also the author of *Writing for Interaction: Crafting the Information Experience for Web and Software Apps.*

Information developers are often the first line of quality assurance in many products. According to Linda, "by the time we finish a project, we quite often know the most about the product…. We understand the entire process a user will experience and can provide users with the appropriate information, so they can successfully complete their tasks."

Writing for Interaction

The information experience includes the text in the user interface, the interactions, and the visual design. Therefore, it is crucial for information developers and designers to work together to design an effective and engaging experience.

Here are a few rules to keep in mind when creating an enjoyable and effective user experience.

- ***Know your users***—determine the type and amount of information users need, depending on their role and what they need to get done (personas).

- ***Integrate information***—develop and implement information (embedded assistance) into the application as part of the feature, instead of adding it on after the fact.

Figure 1. The Trulia mobile app is aimed at users looking for homes for sale, apartments for rent, and open houses

Figure 2. Onscreen text helps users understand what these settings actually mean

- ***Create content guidelines***—set guidelines for tone, language, terminology, and typography to ensure the information experience is consistent across the application. This improves the user's ability to scan, read, and understand how to interact with the app.

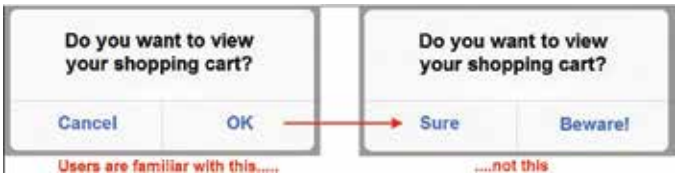


Figure 3. Standard language and buttons that users are already familiar with

Information developers play a crucial role in the collaboration between design and development teams who strive to provide users with an exceptional and intuitive information experience in the user interface.

- ***Create task-based content***—focus on providing the right content for an entire workflow and for each single task. Break multi-part procedures into shorter, manageable individual topics so that users don't get lost in a sea of steps. Three ten-step tasks are easier to follow than a single thirty-step task.

A Few Challenges

One of the main challenges that we face when working on projects, is helping product teams understand the importance of bringing in an information designer from the start. This can help the team craft the application's user interface (UI) as a unified source of information. This is much easier to achieve at the beginning of a project, rather than trying to fix something that is nearing final development.

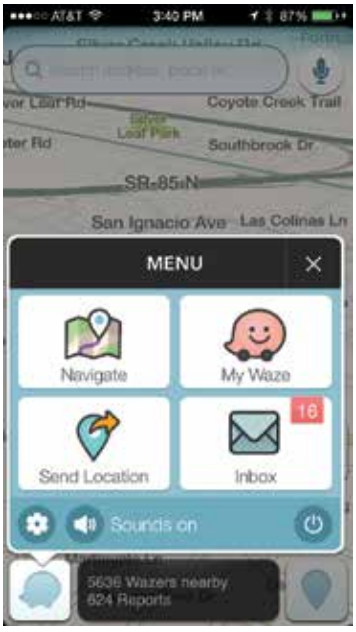
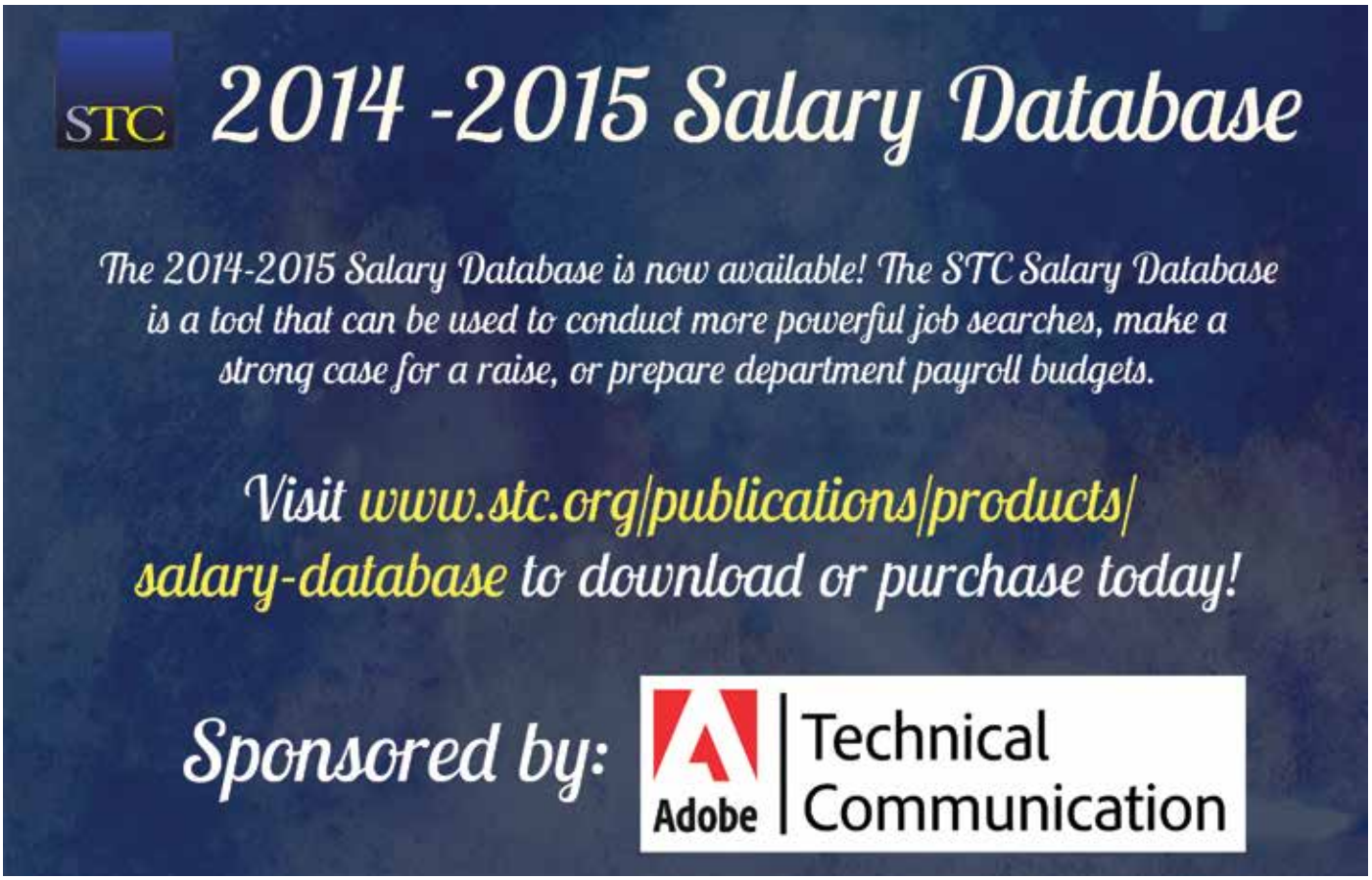


Figure 4. The Waze mobile app clearly displays the tasks the user wants to do

Another challenge information designers face is that developers are not always native English speakers, so the text is sometimes unclear. With an information designer responsible for the UI labels, the text that appears in the product's UI is clearly defined and consistent, ensuring that users will have a more successful experience.

Linda emphasizes, "You need to gain the confidence from the developers in what you do. Once you've proven yourself, it's easier to do."

SOPHIA MOUSTAKAS-MARX *is a senior user assistance developer at SAP who works closely with user experience and development professionals to create information experiences for users that ensure usability, simplicity, and clarity. In addition, she is a passionate user advocate.*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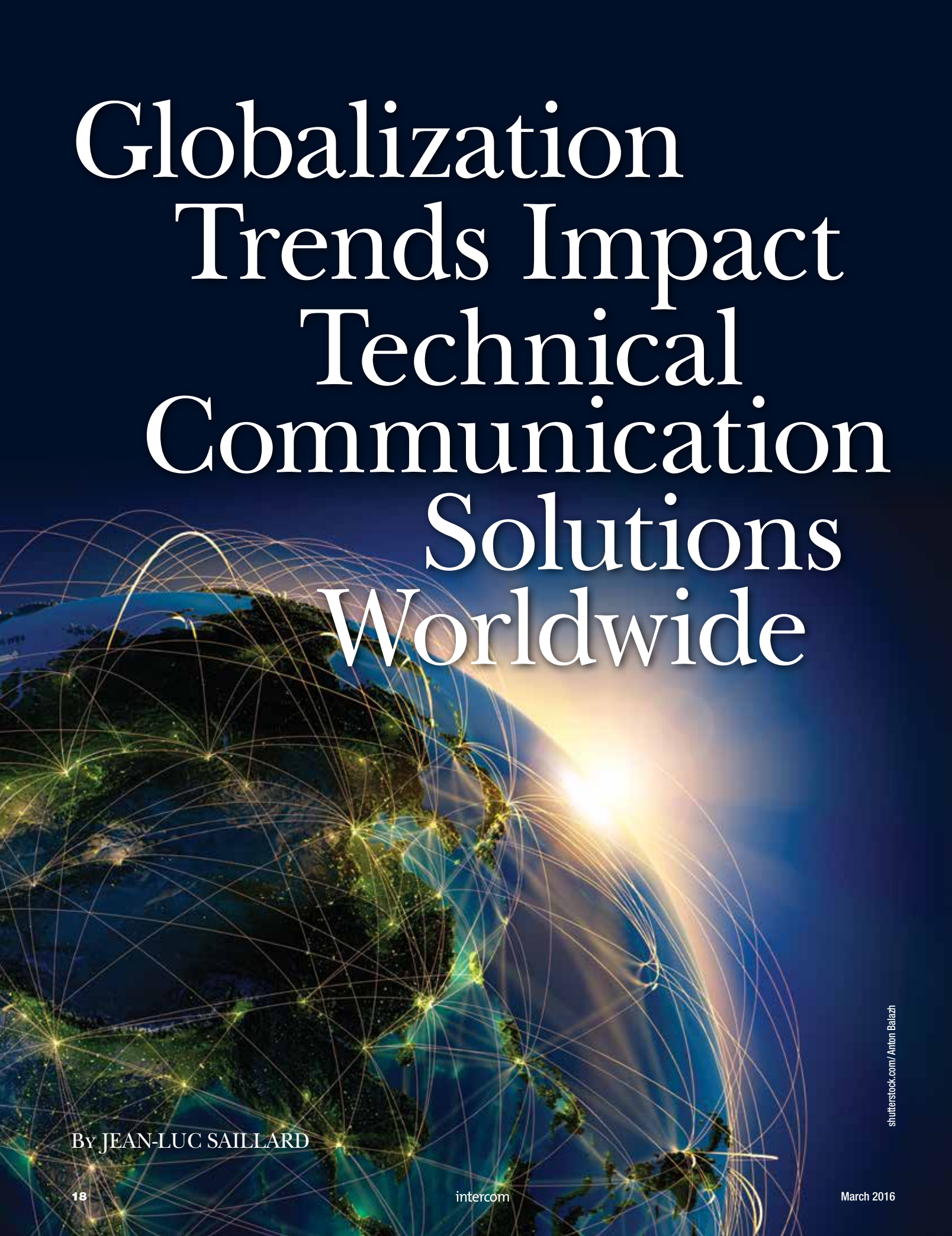

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By JEAN-LUC SAILLARD

Globalization: Creative Destruction in the Translations Industry

Continued development in global communications requires faster information exchange, which is not possible without the corresponding engineering support. This relates not only to mass communications, such as cell phones or the Internet, but also to technologies for translating content into other languages, the most advanced developments in the translation industry.

Companies might seek to set up a branch in a foreign country, with almost all countries open for foreign business. Here is what TAUS International Organization, a translations industry think tank, has to say: "We think translation is becoming a utility. What this means is that translation is becoming something similar to electricity, Internet or water." The machines have learned to translate "on the fly" and they do that by using machine translation (MT) technology.

Today, translation is needed in all areas—documents, websites, applications, spoken or written communications—a failure for partners to touch base would put their collaboration at risk.

Figure 1. Growth in content creation

And it's not only communications that need more and more translation, but the scope of content that has to be translated is also growing. This means that companies need to translate more, while maintaining their speed. The management processes that are used in the translation industry are far from perfect and can benefit from improvements. After we saw this, we decided to develop a solution that would help both translators and everyone else dealing with inter-language communications. When we started marketing the product, we understood that it had to be free and available to anybody.

Automation Translation Technologies: Past, Present, and Future

The first automated solutions started to appear in the early 1990s. The systems were based on a core component—translation memory—that enables the accumulation of translations performed earlier and the reuse of any repetitions. When the system identifies a repetition, a user can just copy the translation from the database. Besides translation memory, CAT tools (computer aided technologies) feature a number of other functions, such as machine translation (MT), glossaries, automated spelling checks, and more.

Cloud-based services started to take ground across many industries a long time ago, but the first non-desktop professional translation solutions appeared only in 2012-2013.

SmartCAT has become one of the first fully cloud-based CAT systems worldwide. Earlier systems were based on client-server architecture: translators would work in desktop-installed programs, while a company-controlled server was used to migrate translation resources (translation memories and glossaries) and manage projects. This architecture is hard to roll out and support, while it also has limited scaling capabilities. At the same time, the price tag for such systems is quite high and they are hard to get around. And our developers are continuously working to make all SmartCAT interfaces as convenient as possible: to do that, we leverage *usability* tracking techniques and user tests.

SmartCAT is the only CAT tool that uses morphology search both for source and target texts. This search function is a much more complex option as compared to a conventional search function, while the program includes special word-form dictionaries that are created based on changes logic. This enables the system to find a word, irrespective of the word form (whenever you search the word "search," the system will also show results for other word forms, such as "searches," "searching," etc.). We also work hard to deliver the most effective machine translation functionality. Let's take a more detailed look at machine translation.

The efforts to develop a machine translation system originally started as early as the 1950s, setting an ambitious goal to completely replace professional translators. Now, after 50 years, the industry players believe that machine translation, when used professionally, should help translators cut the time they spend on translations rather than replace translators altogether. In this way, the focus of professionally used machine translation has shifted to effective integration within the translator environment, adapting application scenarios and post-MT editing. The focus has shifted from mere editing of machine translation to having a number of automated suggestions and changing a longer phrase in just a couple of clicks, etc.

Some of the engines we use can automatically apply terms, stored in customer glossaries and translation memory. In addition, machine translation engines can save the formatting. For instance, whenever any word is in bold or has hyperlink in the source, the system would identify the respective fragments in the translation and retain formatting, so the translator does not have to spend time on these actions.

Below is a step-by-step description of the process to execute a standard translation project.

Step 1

The manager or freelance translator (depending on whether it's a corporate or freelance user) creates a project and uploads files to be translated. At this stage, one of the more complex modules is used—file disassembly module. The file disassembly module is used to "read" a file and select the textual information, while any data concerning tagging, formatting, and element locations in the file will be handled at the next stages.

At the same time, the obtained text is divided into individual sentences, as translation memory is used at the level of a single sentence. The translation editor also presents the text, divided into individual sentences. The editor contains a table with sentences from the text, presented in a consecutive manner.

After the translation has been completed, the file disassembly module assembles the final document version, using the translation and file tagging information log, created at the disassembly stage. The processed files may feature lots of formatting and a complex structure, which makes disassembly processes extremely complex both in terms of algorithms used and system workload.

Step 2

After the file has been disassembled, but before translation assignments have been created and work on the translation commences, the system gathers the statistics data for the uploaded documents. At this stage, each sentence is compared against the translation memory bases: the system searches for any repetitions between earlier translations and the text being processed, identifying what are also known as matches. The system enables not only a search for matches, but it also determines the degree, as a percentage, to which sentences match. The manager can use these data to calculate time needed and the costs for the project; the more matches are there, the less time and money a project will require. These data enable the manager to build an optimal team of translators and editors to carry out the project.

In order to identify any matches, the system uses a special module, known as the full-text search module, which is one of the most important and complex components of the system. This module is also used for glossary term searches in the text and certain automated verifications.

Step 3

At the next stage, the assignments are distributed. The manager decides on the team members (translators, editors and proofreaders) and then assigns particular documents to them within the project. If a document is too large, the manager can assign several members to a single document. If the manager has already set up a basic team for the project, this won't pose any problem. However, this is not always the case.

Step 4

After the manager has decided on all team members and agreed all details with them, the translation can commence. As we have said before, the editor interface is a table with each sentence presented in an individual segment. The translator needs to translate these segments, using the automation tools that we have described.

During the translation, each sentence undergoes automatic verification. When the system has not identified any problems, the translator can save the segment. The translation is simultaneously saved to the final document version and translation memory base, which enables the subsequent reuse of the translation. Then the translator moves on to the next sentence. When the translator has moved on to a new segment, the system searches for any matches between the active segment and translation memory, uploads machine translation and searches for glossary terms.

So, the translation of each sentence results in a number of queries to the database and full-text search engine, increasing system workload. This is particularly important when a file is handled by a team and not just one translator. The stakeholders engaged in a project—translators, editors, proofreaders, managers—all need to interact continuously with each other.

Whenever the system is used by a team, you can easily see who has been assigned what documents and what changes have been made. In addition, SmartCAT has a so-called anti-conflict system: while one translator is working on a segment, it is blocked and nobody else can make changes, meaning there is no risk that others will interfere with a translation process.

The system automatically calculates the number of words translated and progress for individual translators. In this way, the team is always aware of the time needed to complete the project and can take timely decisions in order to enable it to complete the project on time.

Teamwork: Challenges and Solutions

One of the challenges faced by teams that need to handle large data volumes, is how to set up joint efforts to use translation resources (translation memory and glossaries). All CAT programs seek to address this need in one way or another. In desktop-server systems, the server is used to migrate resources: the resources are stored on the server, while translators need to connect to the server from their desktop applications in order to access the updated resources. Arranging this process in such a way as to cover all translators can be hard and costly for a company. Using a cloud-based CAT tool, all team members work within the same system, which solves these issues and makes their work easier and more effective.

The second challenge is about how to effectively arrange communications within a team. Team members must always be able to consult on translation, sort out issues and take joint decisions. Cloud-based solutions are a totally different ball game in this regard, and SmartCAT developers work hard to enable these functionalities in the most effective and convenient way. One such function is simultaneous translation and editing, enabled in SmartCAT. Generally, the editor takes on a file only after a translator (or a team of translators) has completely finished work on the translation. In SmartCAT, the editor can start working after the translator has completed just a few sentences. This "combo" enables the editor, who is more experienced in the respective field of expertise, to pass on comments to the translator as regards certain mistakes, so that the translator can avoid them down the line. In this way, working time can be significantly decreased, as the editor does not have to correct those mistakes.

The third challenge is how to handle so-called conflict situations and cases, when several translators make changes to the same sentence. This is how a standard procedure appears for desktop-server systems: a translator downloads a document from the server to their desktop application, completes the translation and uploads the file back to the server. In some cases, while a translator is uploading their translation to the server, they can see that another translation has already been uploaded for the same segment. This is a conflict situation, requiring a choice of several alternative translations. Additionally, in this scenario two translators would spend time translating the same segment. In contrast, cloud-based systems enable changes to be saved in real time after a sentence has been saved. However, not all CAT systems assume that several translators can do this at the same time, which will result in a conflict. In SmartCAT, all changes are immediately saved and saved segments are blocked, which prevents such conflicts.

Clouds for Translators

When developing the system, the hardest and also the most exciting challenge for us was how we could fully use the potential of the cloud and not just reproduce the desktop system scenario in a browser. These are, for instance, the abilities to use the translation resources (translation memory, machine translation, digital dictionaries and glossaries), simultaneously and in real time, and apply machine learning to better analyze source data.

Of course, you need to have good hardware to ensure due performance of such a complex system, but, more importantly, the system program code should be optimal and economical, making sure that each operation uses as few resources as possible. If the optimization is not done right, even the easiest operations and queries can overwhelm the system, resulting in a drop in performance.

In addition, enabling effective capabilities for teamwork has always been a core challenge for us. SmartCAT, as we point out above, gives all team members a chance to collaborate and interact as closely as they need to, while also ensuring any changes you make are saved instantaneously.

> [I]ndustry players believe that machine translation, when used professionally, should help translators cut the time they spend on translations rather than replace translators altogether.

Developers always look to deliver the most optimal environment for such complex teamwork. For instance, a translator might "find and replace" a word, which is an operation that would require the processing of every segment of the text: the system will need to find all occurrences of this word and replace them accordingly. When there's only one translator working on the document, this is not difficult. However, for teamwork, the system needs to ensure that each individual segment has not been blocked by another translator, then block such segment, make changes and unblock it. At the same time, the system needs to inform all translators who are working on the document as to the changes made, so that they can instantaneously see these changes.

API Integration

The system should have flexible API capabilities that would enable it to roll out various integration scenarios. One of the most popular API capabilities is integration with content management systems in order to automatically send translation assignments. The customer's information system, for instance, website or Web store, can easily connect to SmartCAT, send any product description texts or other information and then get it back.

This approach enables the full automation of a process to exchange assignment with no need to involve managers. The majority of services now frequently update the content, but in extremely small portions. If such small pieces of information are exchanged via email rather than API, the operations might take more time than the translation itself. This is what makes the integration capabilities so beneficial.

Another capability is the so-called HotFolder: a capability to integrate SmartCAT and a folder, located on a user's desktop computer. When a user places any file in the folder, it is automatically uploaded to SmartCAT, while the completed translations are placed back to the same folder next to the source files. Besides uploading the new files, this function may be conveniently used to handle revised documents: whenever you upload a new version of an existing, previously translated file, SmartCAT will identify only those portions that have been changed and present only them for translation. This capability is particularly useful for software and games developers. When a

company releases a new program version, this approach enables the quick translation of any amended portions of interfaces or documents.

Future: Marketplace and Disintermediation

At SmartCAT, we apply great effort, seeking to develop an ecosystem for independent services and solutions providers on the platform. We will continue our work to improve the search functionality: in addition to standard filters by parameter and rating, we plan to roll out a smart search function that enables analysis of a text and selection of team members who have the most appropriate experience.

This doesn't mean that some customers will be able to access the data of other customers, as the comparison will be done automatically and users won't be able to access the information being analyzed. The customer won't have to manually assign a document subject or select team members; the system will automatically select specialists based on information on successfully completed projects in the respective field and for the same language pair. The function, enabling the search for documents on a similar subject, requires the use of a number of text analysis algorithms. Previously, no other CAT tools have enabled a real-time system with data harmonization. This is the patented technology of our company.

The second area of development is automated interactions with translators. We are currently testing algorithms, which would enable automated team creation, making sure that a customer or manager benefits from the reduction in time needed to manage the project and that time and costs are optimized as much as possible. The system will analyze the scope and complexity of an order, deadlines and budgets. Based on the obtained data, the system will determine the number and qualifications of team members, send out notifications to them and invite them to take part in the project. Within the project, the system will also be able to monitor progress and deadlines, "push" team members or notify the customer or manager as to any issues that arise. In order to fully implement all these functions, we will need to work hard, but we are convinced that we will succeed.

The application of innovative technology to select team members and automatically build up the optimal translation process for each project enables a drastic reduction in the barriers for independent translation arrangement and decreases the time requirements for translation projects, as a result, ensuring a guaranteed level of translation quality, independently, easily and at a drastically lower cost than before.

In addition, there is a number of other technology solutions that we are currently testing internally and planning to subsequently roll out as part of our system. Among such functions, for instance, is voice input and control technology, enabling system control and dictating the translation by voice. These will be mainly used in the mobile version of SmartCAT that is also currently under development: it's not as easy to type in a text on a smartphone or tablet. This program version will also feature various types of suggests and cues; the system will cue the user as to the most appropriate phrase, based on the subject of the text and available translation resources.

Some of these solutions will be available as optional modules for SmartCAT, and we are even planning to establish an ecosystem for the development of such modules in order to enable third-party developers to make improvements to the product.

The marketplace is a module that enables the connection of customers and providers. This is an enormous database of freelance translators (currently including over 50 thousand translators). In order to get around such an enormous scope of data and select those translators that are the best fit, the system enables a search of translators by various parameters.

The function enabling a search across the translators database makes it possible to process a wide range of queries. One of the most popular queries is to find a native English speaker for editing: this parameter (mother tongue or non-mother tongue for an individual translator), as many others, can be used to search across the translators database. The translators registered on the SmartCAT platform currently cover 1,000 language pairs.

When you decide to recruit a particular translator for a project, with whom you work for the first time, you always need to verify their qualifications. The translator might have specified, at their own initiative, the availability of international certificates and portfolio, they might also pass our test, and in this case you will be able to review and assess the results or base your decisions on the findings of our specialists (who verify the test results in an extremely rigorous manner). The last option might be useful for those who need to arrange a translation to Brazilian Portuguese, although they don't speak this language, which makes it hard to assess the translation.

We have already started to test the system for automated selection of translators for texts from our customers. Based on the subject of the text, the average translator's speed, budget and scheduled deadline (if a deadline is specified), the system will search for the translators (editors, proofreaders) who have already successfully completed projects in similar fields and for the same language pair. This is the patented technology of our company.

For the managers who are responsible for translation processes arranged within a company (including language service providers), the completely automated team recruitment process will help save about 20% of their work time.

JEAN-LUC SAILLARD *is the COO of SmartCAT. He has over 20 years of management experience in the translation industry. His passion for technology has led him to be an early adopter of translation tools from the DOS-based TM tools to the latest workflow and MT applications.*

President's Mind: A Mid-Term Report

BY BERNARD ASCHWANDEN | *2015–2016 President*

JULY SEEMS LIKE both mere days ago and years behind me. With the election upon us, and a new board to instate in May in Anaheim, it also seems like mere days but months to go before the handover of the gavel to Vice President Adriane Hunt. Time has that mystifying ability to seem to pass at a snail's pace, or to fly by, but looking back (and ahead) at my mid-term gives me some insight on the many things that have happened to STC during my term as President.

During the Annual Meeting at the Technical Communication Summit in Columbus, Ohio, in June 2015, the current board was sworn in. As hundreds of members came to the main hall to be introduced to the new Board, discuss topics of interest, and make motions of their own, I had the chance to say hello to almost every person who entered the room. It was incredible to see the diversity in our membership. There were even two brand-new members in attendance who had just signed up for membership in STC at the Summit!

Since being sworn in, the Board of Directors has debated topics such as changes to our bylaws, decisions around locations for future Summits, plans around professional certification and the reopening of the Certified Professional Technical Communicator certification program, the work of our many committees and task forces, and the very future of our Society. As someone who is a seasoned professional, I've been looking at the membership with an eye toward attracting a younger crowd. The challenge of an association continuing to be relevant to a diverse population—people who are new to the Society, those who have 5 to 10 years of experience as a member, or those who, like me, are over 40 (or 50, or even 60)—is an interesting challenge.

Certification is on the comeback, with a three-tiered structure (Foundation, Practitioner, and Expert) intended to certify technical communicators looking to set themselves apart. For those new to the profession or for people who have already put in the years, all will have the opportunity to independently validate their skillsets and be recognized in the industry as Certified Professional Technical Communicator.

STC communities have also been active in 2015, updating websites and hosting meetings. Following the current industry interest in APIs, an API SIG formed to facilitate discussions on topics related to API writing. In the interest of keeping STC relevant, I'd encourage those curious about forming a SIG on a hot topic area to review the process for chartering a SIG and help build STC's body of knowledge in 2016.

STC's Corporate Value Program has experienced growth in 2015 as well. If you are a writer in an organization that has broad reach and many employees locally, nationally, or even globally, you may want to help support all the writers in your organization by joining this program as a group membership.

The Gold Value Package membership also grew in popularity in 2015. The number of people who sign up for this value-based membership increases every year, and it's great to see it. The overall package offered (Classic membership, free webinars, SIG membership, print *Intercom*, and discounts) makes it an obvious winner for those looking to make the most of the benefits STC offers.

The efforts of the staff should not be forgotten either. Without the support this small group (comprising under a dozen people!) does every day, we wouldn't be the Society we are today. Add to that the inordinate amount of work that is done by volunteers and you get, literally, tens of thousands of hours put into the advancement of the Society and the membership. No wonder we are experiencing growth.

Looking ahead, the Summit is in Anaheim, California in May this year! The changes implemented last year are largely back, meaning a far more social and affordable Summit. Awards will have a more casual and fun feel. There will be chance to mix and meet with friends new and old. Networking. Education. Socializing. It is safe to say that STC membership provides us all with an opportunity to do enjoy the experience to its fullest.

For those who are lifelong members who have more years within STC than outside of it, thank you for your ongoing support. For those who have been members for 5 to 20 years, stick with it! There is a lot more to come in the years ahead. Lastly, for those who are new to STC, who are students, new to technical communication, or even considering the field as a career, welcome.

I sincerely thank every person who touches STC for participating in supporting the field of technical communication, and I know there will be many more years of great interaction ahead. While I do hope to see many of you in Anaheim, I also understand that we can't all travel to California. I plan to attend events in Colorado, Pennsylvania, New York, and other states and communities in the months that I have left as President. I hope to network with you there.

The past months have had challenges and successes, and the rest of my term is filled with a chance to meet and talk to more of the membership. The year ahead is promising, and STC is on a path to a successful future. Thanks for being a part of it.

A Day in Downtown Los Angeles

SHERRI HENKIN | *Senior Member*

DO YOU HAVE AN EXTRA DAY during your trip to the STC Summit in Anaheim, Californina, 15–18 May? Consider spending that day downtown in Los Angeles!

Getting to L.A.

From Anaheim, you could rent a car and battle the 405 other freeways (we call fast-paced four- or five-lane thoroughfares *freeways*, not *highways*). Once in Los Angeles, there are parking structures, on-street lots, or meters.

A more relaxing way to travel from Anaheim is by Amtrak. You'll arrive at Union Station. From Union Station, there are several public transportation options to downtown neighborhoods, museums, and cultural sites. Use the Metro's website to plan your trip.

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Griffith Observatory overlooking Los Angeles

Sites

The closest historical area to Union Station is Chinatown. Explore the history of Chinese culture in Los Angeles at the Chinese American Museum. Take a walking tour to visit the unique shops. And refresh at one of the area's restaurants.

Perhaps you prefer to learn about "the birthplace of Los Angeles"? Explore Olvera Street, best done by foot. Olvera Street offers ethnic restaurants, shopping, and entertainment.

Another L.A. icon is the Walt Disney Concert Hall, the winter home of the LA Philharmonic—and May is still *winter season* at the Phil. Check out the schedule for the concerts around the Summit dates. Can't make it to one of the concerts? Consider touring the Music Center complex and view the striking architecture; perhaps enjoy a picnic lunch on the Plaza.

Downtown L.A. hosts historical, art, cultural, and science museums. Take your pick! Bonus: several museums offer free admission days!

- Japanese American National Museum
- California African American Museum
- MOCA (Museum of Contemporary Art)
- The Broad. Opened in late 2015, it features modern and contemporary art
- GRAMMY Museum exhibits show the history of the GRAMMY® Awards and music art and technology
- FIDM (Fashion Institute of Design and Merchandising) Museum and Galleries display historical and contemporary fashion collections
- California Science Center hosts IMAX and the Endeavour
- Natural History Museum

There's a lot more to see in L.A. We have beaches, a park system, Griffith Observatory, shopping, and of course, Hollywood. The surrounding areas host many attractions: the studios (think CBS, Warner Bros., Paramount), Getty Museum, Huntington Gardens, or the Long Beach Aquarium. But if you only have a day, take Amtrak and visit Downtown!

Foundation Certification and Continuing Education Requirements

BY LIZ POHLAND | *Director of Communications*

AS YOU MAY have heard, STC's professional certification program reopened in 2015. The new program, Certified Professional Technical Communicator (CPTC), is structured into three tiers—Foundation, Practitioner, and Expert. Foundation CPTC is now available, with Practitioner opening in 2017, and Expert soon after. The Foundation CPTC certifies knowledge of the technical communication profession through successful completion of an exam based on a body of knowledge. The body of knowledge STC has selected for the Foundation exam is Richard Johnson-Sheehan's *Technical Communication Today*, Fifth Edition (ISBN-10: 0134419391), *www.mypearsonstore.com/bookstore/technical-communication-today-special-edition-for-society-9780134419398?xid=PSED*. Successful completion means taking a 50-question, multiple-choice, closed-book exam in 40 minutes at a 70% pass mark (or 35 out of 50 correct answers). The Practitioner and Expert levels will certify knowledge and application of best practices via evaluations of work samples by subject matter experts.

Aspiring CPTCs, once they have successfully passed the Foundation exam, must also pursue continuing education. Known as Continuing Education Units (or CEUs), all certified CPTCs are expected to remain current in technical communication to keep their credential.

Continuing education for CPTC certification is point based. To remain certified after passing the exam, Foundation CPTCs will need to achieve 12 points (Continuing Education Units or CEUs) over each two-year period from the date of their certification. Two years after certification, point accumulation will be required again to remain

David Beebe Announced as the Summit Closing Keynote

STC IS PLEASED to announce David Beebe as the closing Keynote speaker for the 2016 Summit. Round out your time at the Summit with a forward-looking talk on the dovetail between content marketing and technical communication, titled *Publish or Perish: How to Win the Hearts, Minds, and Wallets of Next Generation Consumers with Content Marketing*.

Today's consumers have gotten really good at two things: avoiding advertising and making better-informed purchase decisions. And because everyone is a publisher, media company, and content creator today, the smartest CMOs are now shifting their core strategy away from advertising as we know it—and towards content marketing. Increasingly, technical communicators are being asked to repurpose their information-rich content for the unified customer experience.

In this presentation, David will examine the changing media landscape, look at the intersection of technology and storytelling, and share insights on how the most effective brands and marketers use a combination of the two to reinvent the way they are engaging with their audiences through the next generation of content. David will also discuss his unique three Cs strategy focused on content, community, and commerce. You'll hear how to develop a content strategy and creatives, the value of working with influencers, examples of distribution strategies, how to get started, how to sell the ideas internally, and how to measure ROI.

David Beebe is a digital media executive, content marketing leader and producer whose innovative work has received two Emmy awards. Known as a change agent, Beebe has a proven track record of winning the hearts, minds, and wallets of consumers with industry disrupting content studios.

Currently VP, Global Creative + Content Marketing at Marriott International, Beebe leads the Marriott Creative Agency, Marriott Content Studio, and real time marketing hub M Live.

MIPTV named Marriott Brand of the Year for its compelling content, while Adweek named Beebe a "Branded Content Master Who Makes It OK to Love Marketing."

A 15-year entertainment industry vet, Beebe founded the Disney/ABC Television Group Digital Studio. He also launched a digital studio with Vin Di Bona ("America's Funniest Home Videos"), produced DVD content for Showtime, and led DirecTV's online content strategy. Beebe most recently executive produced PBS' travel series "I'm Having What Phil's Having." He started his career in the US Coast Guard.

David Beebe's closing keynote takes place on Wednesday, 18 May at the Anaheim Marriott. For more information about attending the Summit, visit *summit.stc.org*.

certified. If certificants fail to achieve 12 points every two years, the certification will be considered lapsed until CEUs are made current. If certificants fail to become current and required CEUs total 24 or more (4 years' worth), their certification will be considered invalid and they must retake the Foundation exam. CPTCs may only retake the Foundation exam every 4 years.

Other than the fee applicants pay to take the exam, there is no annual maintenance fee for Foundation certification. Until a more formal process is established, all CEU information should be collected by the certificant and emailed to STC at *certification@stc.org*. Have questions about certification? Email me at *liz.pohland@stc.org*.

Continuing Education Points may be obtained the following ways:

Event	Points
STC Annual Membership (any membership type for Foundation certificants)	2
STC Recorded Webinar (self-study)	1
STC Live Educational Webinar (free, sponsored, and community webinars excluded)	2
STC Online Courses*	6
STC Summit Pre-Conference Courses (full day)	6
STC Summit Pre-Conference Courses (half day)	3
STC Virtual Summit	4
STC Annual Summit	8
Begin and complete a college accredited course related to the Tech Comm field**	8 points per course
Published articles that relate to any aspect of Technical Communication (2/article)	2
Published books publicly available on topics related to Technical Communication (5/book)	5
Presentations at conferences related to aspects of Technical Communication (2/presentation)	2
Total needed within 2 years post-certification date	**12**

** Students must earn a certificate. ** Adjudicated by STC once a transcript is submitted.*

Fundamentals of User-Centered Design

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BY BRIAN STILL | *Member*

USHERED INTO EXISTENCE with the groundbreaking work of Donald Norman in 1986, user-centered design (UCD) focuses on user needs and wants within realistic contexts of use. As Norman writes, "User-centered design emphasizes that the purpose of the system is to serve the user, not to use a specific technology, not to be an elegant piece of programming. The needs of the users should dominate the design of the interface, and the needs of the interface should dominate the design of the rest of the system" (Norman 1986).

How should one go about doing that? Well, there are a lot of different approaches to consider, including thorough user research and profiling, as well as environmental and competitor analyses. Multiple methods also exist to help designers effectively integrate users into the process. My book, *Fundamentals of User Centered Design*, which I co-authored with Kate Crane, covers all of these approaches and methods in detail (it's due out with Taylor and Francis's CRC Press in 2016). Unfortunately, a column like this can't offer such detail, so the best I can do here is impart an understanding of some key principles you should consider, learn more about, and ultimately find ways to implement in anything you design, such as documentation, websites, mobile applications, etc. If you make things for people to use, employing a UCD approach guarantees that users are the focus of your work.

Involve Users Early and Often

This involvement doesn't make the user the designer, but it does make their needs and wants a part of the design process, as early as possible, before a prototype is created. Eric Raymond, in talking about the value of open source software (OSS), notes that one of the valuable things about OSS is that more developers, working together, openly sharing code, means fewer problems: "More eyeballs, less bugs." This is true also for UCD. By focusing as soon as possible on user needs and wants, the design is exposed to more eyeballs, the important eyeballs of the users, and potential big problems are discovered and addressed before they become too big to be fixed.

At the beginning before a prototype is created, during prototype creation and testing, and when the product rolls out and becomes live, users should be involved as much as possible. Surveys, interviews, focus groups, site visits, usability testing, analytics—the list of methods goes on. This is always a challenge, integrating users effectively into the design process, but the value returned to you for including users at every stage of the process, catching problems and saving money and then eventually creating a better product that your users like and buy, is your reward for the hard work you put into integrating users early and often.

Design for Use in Context

Users live in the real world and use the things made for them in a dynamic, complex real world. Jeff Hawkins invented the Palm Pilot. Before he put what became a game-changing technology into

This column examines the ways technical communicators contribute to the development of more usable products, especially those used in complex, dynamic environments. Novel usability evaluation methods and design techniques, as well as those rediscovered or repurposed, will be the focus. Please send your comments, questions, and suggestions for future articles to me at *brian.still@ttu.edu*.

the marketplace, he wanted to know how it would be used, and how that use could be made more effective, for users in their everyday activities. So he literally he cut a block of wood to approximate the size he envisioned for the Palm Pilot, used a chopstick for a stylus, and then he walked around experimenting with his rough prototype to understand how it would be used in context.

Don't guess. Don't create something and get feedback on it from unrealistic users in unrealistic settings. Understand the situations where users will use a product and design for use in those situations.

Keep It Simple

In a trend away from overloaded, drop-down menus that forced the user to navigate through multiple options which often had child or grandchild menu options, Web designers made efforts in recent years to remove or hide less used features so that users could interact with a cleaner, more intuitive interface. The hamburger menu that has resulted from this is arguably a move too far in the wrong direction, away from complicated menus, to be helpful. Still, there is an important balance to be struck in giving users what they need and want but finding a way to make that simple. Google's search makes it simple. Amazon's one click buying makes it simple. If it is important to the user, try to make it simple for them to do it. If it isn't important, try to find ways to hide or remove it so that it doesn't get in the way of the user viewing the rest of the interface as simple and thus easy to use.

Know Your Users

What do your users like, not like? How do they work? Where do they work? What are they good at, not good at, need help with? There is a rich collection of heuristics out there that guide you on different user types. Many argue that you should design for the mainstream or intermediate user since most people that use products are neither beginners nor experts. There's some logic to this. But a better approach is to research your users as much as you can and then create personas and profiles that reflect who they actually are. As you begin to design and test prototypes of your products, even as the products become available for everyone, continue to gather feedback and keep your knowledge of your users current. The more you know about your users, the better your products will be for them.

Design for Emotion

Users sometimes just take milliseconds to make a decision about a product, and that decision is typically driven by emotion more than logic. We cannot just design for a product to be usable. It's important but not enough because it doesn't take into consideration the fact that users are emotionally motivated. Norman (2013) suggests that a good, user centered product appeals to users viscerally, behaviorally, and reflectively. In other words, an effective UCD product makes the user want to pick it up and use it—it's a positive, visceral reaction. It also makes us feel satisfied or effective using it, appealing to our feelings and influencing our behavior. Finally, when we think about or reflect on using the product, we feel emotionally positive about the image of our using it. For example, I buy a mobile device because I like the sleek design, the color, the large, inviting touch screen (visceral), I like how easy it is to use (behavioral), and I like the idea that I have such a cool, hip device (reflective). Not every product can be so emotionally appealing, especially if it is something a user must use in the workplace. But good UCD still makes that product emotionally effective, if anything finding ways to reduce or eliminate negative emotional feedback.

Trust But Verify

If you're designing something, you should trust your vision, your capabilities, and your knowledge of the product, the user, and the situation. But verify that trust. Set up places along the way during the course of the design to have users try out what you've made for them so you can verify that what you're doing is achieving their needs and wants. And don't just trust what users tell you. Triangulate your findings by drawing on different kinds of feedback, namely verbal, observational, and performative data from users. Ask users what they think, but also watch them use the product and measure the performance of that use. If all of these confirm a problem, you've verified more accurately that it is likely a problem. Trust that you've done good research, that you've created a good design, especially if you've followed sound UCD practices. But verify that trust.

Discovery Never Ends

The acronym we emphasize a lot when designing for and also evaluating user experience is DEAR: discover, evaluate, analyze, report. Good UCD is about an ongoing discovery process. You need to research your users, assess the situations where they will use the product, balance user needs and wants with contextual demands, client goals, and material limitations of the product, and then you must create prototypes, testing them all with users and then using that feedback to discover more about user needs and wants and, in that process, discover how to make the final product as effective, satisfying, and efficient to use as possible. Good UCD never ends, even when a product is created.

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Winning the Writing Game

BY THOMAS BARKER | *Fellow*

A RECENT ARTICLE in *Vitae* by Elizabeth Hyde Stevens at Boston University gives us a glimpse into the world of the academic who wants to expand the reach of her writing course. In "Reaching Students who 'Don't Need Writing,'" Stevens brings up a key point about writing among STEM (science, technology, engineering, and math) students: their motivation. Realizing that many of them are gamers, Stevens observes, "When you think about the amount of dedication, attention, and precision that goes into saving the planet from zombie alien overlords, you realize that gamers are already highly motivated achievers. They only need to transfer their skills to writing. And the key to that is giving them a winnable goal." New directions in game-oriented writing courses might also give instructors a winnable goal.

In keeping with this issue's theme of technical communication on the Web, it might be interesting to follow up on the academic conversation about instructional design and gaming, and gamification in writing instruction. What would a game-based or "gamified" writing course look like to a student? What principles of gaming can be useful in course design? What would such a course look like from a teaching standpoint?

To answer these questions, I spoke with Roger Graves, director of the Centre for Teaching and Learning at the University of Alberta. Graves specializes in writing across the curriculum, or writing as a tool for all disciplines in the university. Three years ago Graves, and two of his colleagues, Heather Graves and Geoffrey Rockwell, redesigned an earlier version of a basic research and writing course. The result was a course called "GwRIT," or "The Game of Writing: Writing in the Disciplines."

But the course is not simply a game version of writing. The way to win at using games means that you need a winnable interface and student experience, sound gaming principles to drive the design, and a working and winning course model.

What the Student Sees

Let's start by looking at "The Game of Writing" from the students' perspective. If I'm a student in GWrit 102, I log into something called the Game of Writing System. I see some very typical writing course elements: syllabus, assignments, and rubrics. I see videos explaining ideas like the writing process, research topics. This looks easy, but I'm not seeing how I can save the medieval village here. I read on.

The Introduction to the course explains that this course is based on theories of writing and that I will work in an "interactive writing context." It tells me that learning how to use the reviewing/commenting function and to respond appropriately and usefully to others" is a key component in learning to write well.

Hmmm. I skip ahead to my first assignment. Here is something I have seen before: three assignments to choose from: one from STEM areas, one from social sciences, and one from arts. This is new because I can write on any one I want. I choose my warrior path.

I read an assignment. Here is something new: I can see all the other drafts of all the other 169 students in the course. So if I'm lost I can probably dip into someone else's work and get inspired. So I write my essay and submit it. I read the work of others. I find something I want to comment on. I highlight it and write my comment. Here is where the course starts to look different.

If I get a comment on my writing, I can either like that comment, dislike that comment or zap the comment into oblivion. This I like! But some comments I can't delete, which are the ones with star icons on them. This means that an instructor or TA has marked these as important. These little monsters move to the top of the list and challenge me until I do something about them.

I also see a Leader Board that lists the top 10 warrior commenters. Some writers really get into this commenting. I'm off. I'm learning the genre by reading others attempts to perform it.

So on the surface, the interface, while it may look like the usual Web-browser fare, has some elements that draw me in as a gamer. I have a choice, I have challenges, and I have a team, a cohort of others with the same goal. What's more, I can see their work. If we lift the hood on this interface, what principles are at work?

The Principles of Gamified Writing Instruction

The sophisticated interface that students see did not come about without some careful attention to the gaming ideas that specifically pertain to writing instruction. To find this out, I asked Graves about where the idea for a gamified writing course came from. He explained that about five years ago a grad student came up with this idea to make a writing game based on "gaming" rather than writing. "It was a bragging game, so you would brag about how much writing you did to your friends." I laughed.

"See?" asked Graves. "Anyone in

This column focuses on a broad range of practical academic issues from teaching and training to professional concerns, research, and technologies of interest to teachers, students, and researchers. Please send comments and suggestions to *ttbarker@ualberta.ca.*

writing or tech comm would laugh because you would never do that. So that's the 'gaming' approach. We met with them and we said, 'This doesn't work. No one does that.'"

It turns out there are two approaches to gaming: the competitive approach and the cooperative approach. Graves and his team realized that, unless you're Ernest Hemmingway, writing may not fit the *competitive* game type. According to psychology researchers, *competitive* games tend to damage self-esteem, destroy relationships, and stunt community development. Better to try *cooperative* games. In cooperative games, players work together to beat the game. Cooperative games reward, connect, and build community.

As Graves put it, "You need to make this a more cooperative game, not a competitive game, but a cooperative game." So this became the foundation of the Game of Writing system. Students see what all the other 169 students are writing. Ideally, the system promotes a sense of community, or co-learners. It's like they're on a quest together.

To reinforce the comradery of the course, the Game of Writing relies heavily on the commenting feature. In fact, the system has four levels of commenting based on roles the commenters play. Your peers are commenters, paid tutors are commenters, teaching assistants are commenters, and your instructor is a commenter. The power of commenters increases the higher you go up the commenting value chain. The higher up you go, the more important the comments become, which builds a kind of winning into commenting.

Here's how it works. First, if you wrote that comment, you're going to get a bump in your grade for writing that. Second, if you're writing a draft and you see a comment on your draft that has a star, you better respond to that comment. "You can do the math," says Graves, "It takes me about 2 seconds to star a comment; it takes me about 2 minutes to write it. When a comment gets a star it moves to the top of the list and stays there." Treating comments this way provides a win for instruction: the system logs roughly 5000 comments *per term*. And it's all voluntary. No need to draft recruits into this army: they volunteer for the challenge of it.

Another principle of gaming at work in the GWrit system is transparency. Students get to read "front-runners" (essays posted early) to get themselves started. Many students, says Graves, report doing this. They read these early drafts as a way to get going. According to Graves they read about 30 drafts, on the average. This average is collected from the students learning journals. Where is the win here? It's the fact that students are not required to do this. They see the opportunity and take it.

The wins for writing instruction, then, lie in creating an environment where cooperation trumps competition, and where students can see the progress, rewards, and engagement (let's call it self-enlistment) of the other players. This speaks to the point of motivation. But how do these principles work in a wining set of course features?

Putting the Principles to Work

The course features a number of recognizable elements: assignments, instruction modules, readings, grading rubrics, and an extensive resources section. It's a blended, flipped classroom, where students meet one third of the time and work online the rest of the time. The course is built on writing principles that move from description to synthesis to reflecting. The foundation of the course is the 4 stages of student development found in Susan MacDonald's *Professional Academic Writing in the Humanities and Social Science*. Those are: 1) non-academic writing, 2) general academic writing, 3) novice approaches to disciplinary writing, and 4) knowledge making, and expert, insider prose. So the course offers a sound pedagogical foundation. But it also features elements that support the gamification principles at work.

One of those features is the completion badge system. Professor Graves walked me through the interface of the program and showed me the Comment badges. These badges mark student achievement. Says Graves, pointing to a badge with a bronze star on it, "So this person's made more than 10 comments so he has the '10 Comments' badge. They make one more comment they get the Silver star, and there's a Gold star, of course." Students also get badges for turning in assignments … on time. "If they turn it in late they get the Turtle badge. And if they hand it in early, they get the Rabbit badge." Another conspicuous feature is the Leaderboard. Students who have done the most commenting get their names on the leader board. You can see the top 10 commenters out of 200. You can see who is winning with comments.

As an approach to writing instruction, the gamification approach offers a lot of wins. In a gamified writing course, like the example of the Game of Writing course at the University of Alberta, the engaging experience of the student, the sound principles of cooperative game theory, and the foundation of strong pedagogy combine to provide, for the adventurous writing instructor, a winning exemplar of innovative instructional design. i

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RESOURCES

Burke, Brian. *Gamify: How Gamification Motivates People to Do Extraordinary Things.* Bibliomotion Inc., 2014.

Kapp, Karl M. *The Gamification of Learning and Instruction: Game-based Methods and Strategies for Training and Education.* John Wiley & Sons, 2012.

Stevens, Elizabeth Hyde. *Vitae.* A service of *The Chronicle of Higher Education,* "Reaching Students Who 'Don't Need Writing.'" *https://chroniclevitae.com/news/1284-reaching-students-who-don-t-need-writing?cid=VTEVPMSED1* (accessed 16 February 2016).

Trends, Disruptions, and the Future

BY JEANETTE EVANS | *Associate Fellow* and **CHARLES DULL**

IN THIS MONTH'S COLUMN, we'll look at some ideas on advances in technology in education and beyond and how these might impact the future of not only education but all learning products that include technical communication. The quotes in the following come from an article by Charles on "Three Technological Trends That Set the Tone for Higher Education's Future" (*http://evolllution.com/revenue-streams/distance_online_learning/technological-trends-set-tone-higher-educations-future/*), which you might find of interest.

Trends and Disruptions

We hear today about trends and disruptions as they relate to technology and change. Advances in technology today often are complex and happening at a fast pace. So distinguishing a trend from a disruption can be hard. Looking at acceptance rates, use, and environment can help to show whether a technology is a disruption or here to stay.

Technology Allows Change to Happen

Massively open online courses (MOOCs) disrupted traditional approaches to learning. Now we can look at whether this disruption will have an impact on the future of education and become a trend.

Technology allowed MOOCs to emerge. MOOCs and their success showed that technology could manage large-scale enrollment. MOOCs also showed that technology could help to deliver instruction effectively.

"MOOCs merged … accessibility with earlier ideas of free tuition. University of the People has been around since 2009 offering free tuition. The Technological University of America began with free tuition and attempted an enhanced disruption with the ambitious goal of offering all programs on Facebook, using social media as the business model.... MOOCs have shown that you can create well-designed courses serving large populations with technology to manage the load (server activity) and increased activity."

Now we need to think about the next step and look at business models and new and improved learning management systems (LMSs).

Social and Adaptive Learning

We can argue that social and adaptive learning are the future. Social learning "is more than social media and less than academic learning." We now have social learning platforms that can provide learning at the point needed. These platforms can also include assessment.

Adaptive learning technology is a newer pedagogy. Learning theory converges with adaptive learning here. With adaptive learning you have a self-mapped learning experience while using assessment to measure and adjust direction.

Time will tell if social and adaptive learning become a trend and even blend.

Games and the Future of Learning

We can imagine that game-based learning and curriculum design are the future. A game-based curriculum design is a way to create immediate feedback and learning on demand, and arguably the only way to do that plus create a learning pathway based on competence. This type of curriculum provides an environment that is agile, socially engaging, and adaptive. Competence is built on social interaction and achievement.

"Imagine using a gesture-based game to build a holographic house to demonstrate mechanics or medical concepts. Award the 'A' grade for

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competency to achieve the outcome rather than to pass a test." Students now see the real world "and fail to see its alignment with education. The trends tell us that if we do not change, we will cease to be effective."

"If you want to find an innovative solution to difficult problems, just watch a group of little kids. Put a bunch of kids together, tell them to play and watch how they learn. They organize, sometimes by small groups, decide on some unwritten rules (which may evolve later on), they learn names and key places and they develop strategy and tactics and play. The outcome is they play and learn new skills, make new friends and develop social skills."

That sounds like a good way to go in the future.

This column investigates emerging technologies in education and how we might use them in our work. Whether it is social media, wearable technologies, the latest in printers, personalization, big data, BYOD, cloud computing, mobile apps, MOOCs, analytics, digital identity, haptic interfaces, augmented reality, or the internet of things, we can all benefit from current thinking on these technologies. Contact the columnists at *jeanette.evans@sbcglobal.net.*

Mark Your Calendar

Organization Events Across the Globe

F.Y.I. lists information about nonprofit ventures only. Please send information to *intercom@stc.org.*

1 1-2 April 2016
The **STC New England Chapter** hosts the annual InterChange conference at the UMass Lowell Conference Center in Lowell, MA. For more information, please contact:
STC New England
interchange@stcnewengland.org
www.stcnewengland.org

2 6 April 2016
The 2016 **Association of Teachers of Technical Writing (ATTW)** Annual Conference will take place at the Hilton of the Americas in Houston, TX. The theme is "Citizenship and Advocacy in Technical Communication." For more information, please contact:
ATTW
http://attw.org/conference/
Conference co-chairs
Godwin Agboka,
agbokag@uhd.edu
Natalia Matveeva,
matveevan@uhd.edu

3 2 April 2016
The Conduit 2016: Connecting Minds – The Mid-Atlantic TechComm Conference will be held at the Giant Conference Center in Willow Grove, PA. For more information, please contact:
STC – Philadelphia Metro Chapter
conference@stcpmc.org
www.stcpmc.org

4 7-10 April
The **Association of Independent Information Professionals (AIIP)** will hold its annual conference from 7–10 April at the Omni William Penn Hotel in Pittsburgh, PA. For more information, contact:
AIIP
www.aiip.org/conference

5 8–10 April
The 2016 **International Society for Performance Improvement** Annual Conference will take place at the Loews Philadelphia Hotel in Philadelphia, PA. For more information, please contact:
ISPI
+1 (301) 587-8570
info@ispi.org
http://ispi.org

6 4-8 May
The **American Society for Information Science and Technology (ASIS&T)** will hold the IA Summit in Atlanta, GA. For more information, contact:
ASIS&T
asis@asis.org
www.iasummit.org/events/ias2016

7 15–18 May
The **Society for Technical Communication** will host its 63rd Annual Summit at the Anaheim Marriott in Anaheim, CA. For more information, please contact:
STC
+1 (703) 522-4114
http://summit.stc.org/conference/

8 15-18 June
The 2016 **American Society for Indexing** Annual Conference will take place at the Conference Chicago University Center in Chicago, IL. For more information, please contact:
ASI
+1 (480) 245-6750
info@asindexing.org
www.asindexing.org/conference-2016/

* STC-related event

The Best Parts of a Technical Communication Job

BY KELLY SMITH | *Member*

I'VE ALWAYS ENJOYED writing, but never thought I could make a living at it until I began working as a consultant and computer programmer. There was so much to document! Not just the databases and code, but how-to guides and user manuals to make my life (and the lives of my users and coworkers on the software support team) easier. Once I started taking on these tasks, my managers began to notice and ask me to create other documents—statements of work, training materials, diagrams, and presentations.

The knowledge I gained from documenting our processes led to a spot on the quality assurance and process improvement teams, where I was in charge of writing and updating policies and procedures and overseeing the documentation of our programmers. I still did a lot of other work—audits, reporting, business analysis—and a lot of administrative tasks, but every chance I got, I wrote.

I wrote nonfiction for work and fiction for pleasure. I published two nonfiction books and worked as a paid blogger and freelance magazine writer. Eventually, I moved to Colorado to work as senior editor for a national quilting magazine, then moved into a contract job for the federal government.

But there was too much uncertainty in contracting—about the next contract, or whether the government would shut down again and would we be paid this time? So when I started looking for a new job, I knew I wanted to be a direct employee, and I wanted writing to be my primary focus.

After dozens of applications and many interviews, I landed my present job where I finally have "writer" in my title and spend most of the day writing and editing. I work in the IT department of a large manufacturing company. I help the technical staff write disaster recovery documents, but I also create software user guides for groups ranging from sales people to mechanics.

In addition to my love of explaining things, I like to be involved where I work. I itched for additional challenges. Since I was in a new job in a new city, I joined several employee committees so I could meet people. When they decided to create an employee art committee, I volunteered to be chairperson. This involves a fair bit of boring administration, but it also allows me to plan cool art displays in our café, create and maintain a website, and deal with all sorts of interesting, talented artists.

Another perk of my new job was the ability to join STC and attend my first Summit in 2015. I've already learned a lot from STC's webinars, conference sessions, and *Intercom*. I feel like a newbie again, but in a good way. In January 2016, I started a Master's of science in technical communication management to build on my experience. If we ever have a tech comm team larger than one, I'd like to lead it.

The best part of being a technical communicator though, is still the reason I started—to explain things and to make life easier for my users.

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